

Title (en)
BISTABLE MINIATURE VALVE

Title (de)
BISTABILES MINIATURVENTIL

Title (fr)
VALVE MINIATURE BISTABLE

Publication
EP 1766642 A4 20120829 (EN)

Application
EP 05761438 A 20050613

Priority
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• US 15115805 A 20050610

Abstract (en)
[origin: WO2005124797A2] A bistable minivalve includes a movable component, an actuator that is elcetrostatically, magnetically, or mechanically coupled to the movable component for controllably switching the movable component between open and closed states, and a casing providing structural support. The movable component has an actuation surface (300) movably positioned in the valve conduit and a bistable element attached to the actuation surface providing mechanical stability to the open and closed states of the movable component. The bistable element may be realized as a pair of elastic buckling beams (302, 304) attached at their midpoints to opposite sides of the actuation surface. Optionally, there may also be elastic support beams (306, 308) attached at their endpoints to the actuation surface and attached at their midpoints to the elastic buckling beams.

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Citation (search report)
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• [X] US 5065978 A 19911119 - ALBARDA SCATO [DE], et al
• See references of WO 2005124797A2

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US 7422191 B2 20080909

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